



REMARKS/ARGUMENTS

This is in response to the Official Action mailed November 14, 2005, applicants have further amended the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, independent claim 12 has been amended.

Reconsideration is respectfully requested.

Applicants also submit herewith the Declaration of Ms. Gale Shipley pursuant to 37 C.F.R. 1.132. Entry and consideration is respectfully requested.

In the Action, the Examiner rejected the pending claims under 35 U.S.C. §112, referring to the language specifying the enhanced stiffness characteristics of the present invention in comparison to a molded construct "devoid of an incubated and cooled fibrous pre-form". This language has been revised to specify the enhanced performance achieved by practice of the present invention in comparison to a molded construct "devoid of an incubated and cooled fibrous *mat*". It is believed that this provides the necessary antecedent basis, in response to the Examiner's rejection. As will be appreciated, this claim language is intended to quantify the improved stiffness characteristics achieved by creating the desired *thermal history*, in accordance with the present invention, in comparison to a molded construct formed from a similar fibrous mat, which has not been subjected to the contemplated incubation and cooling.

In rejecting the pending claims under 35 U.S.C. §102 and §103, the Examiner has relied principally upon U.S. Patent No. 5,492,580, to Frank, with further reliance upon U.S. Patent No. 4,840,832, to Weinle et al. It is respectfully submitted that these references, even when combined, do not teach or suggest applicants' novel molded construct, and accordingly, the Examiner's rejections are respectfully traversed.

As has been previously discussed, applicants' invention is directed to a molded construct formed from fibrous material which provides desirable stiffness as well as other desired performance characteristics.

By the enclosed Declaration, Ms. Shipley attests to the nature of the product formed in accordance with the teachings of the Frank reference, noting the deficiencies in this reference in teaching the formation technique, and resultant performance characteristics, achieved by practice of the present invention. As specifically noted at column 6, lines 33 et seq. of Frank, this reference contemplates formation of a product having a relatively low air volume:

The composite 20 ends up being a nonwoven structure of the first reinforcement fibers which are thoroughly mixed throughout and *encapsulated entirely by* the resin formed from the second melted fibers, the composite having an air volume 20% or less and preferably in the range of 10-15%.

As noted in the Shipley Declaration, this type of construct is sometimes referred to as "fiber reinforced plastic", in that the resultant structure is intended to be, in large measure, devoid of air volume. As such, it is respectfully maintained that this reference cannot teach or suggest applicants' claimed molded construct, wherein the use of multi-component binder fibers facilitates formation of a plurality of fiber-to-fiber point bonds throughout the construct, providing the construct with the desired performance characteristics whereby it is particularly suited for use in automotive applications, such as headliners.

In the Action, the Examiner has further rejected the pending claims with reliance upon the Weinle et al. reference, in view of Frank. However, it is respectfully submitted that even when combined, these references clearly fail to teach or suggest applicants' novel molded construct. As noted above, the Frank reference is limited in its teachings to a so-called "fiber-

reinforced plastic" product, and does not teach or suggest formation of the produce in accordance with the present invention, wherein fiber-to-fiber point bonds are formed to provide the resultant molded construct with the desired performance characteristics.

As specifically acknowledged by the Examiner, the Weinle et al. reference fails to disclose the formation of a molded construct having the desired *thermal history*, in accordance with the presently pending claims. Moreover, it is noted that neither Weinle et al. or Frank teach or suggest effecting compression of a molded construct to a thickness *greater than* the thickness of the final molded construct, as claimed.

As such, even when combined, the references fail to teach or suggest creating a molded construct having fiber-to-fiber point bonds, which is formed by creating a thermal history to enhance the performance characteristics of the resultant product. In this regard, as stated in the Shipley Declaration, it is believed that the products of Weinle et al. are generally like those of the Comparative Examples set forth in the present application, wherein such products do not exhibit the performance characteristics of the present invention, since such products have not been formed in accordance with the presently pending claims.

In view of the foregoing, formal allowance of claims 12, 15, and 19-22 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicants' attorneys, they may be reached at the number indicated below.

Application No. 10/021,929
Amendment dated February 27, 2006
Reply to Office Action of November 14, 2005

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage at First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **February 27, 2006**.

